

References

- Anderson, M. L., C. P. Rice, and C. C. Carl. 1982. Residues of PCB in a *Cladophora* community along the Lake Huron shoreline. *Journal of Great Lakes Research.* 8(1): 196-200.
- Baker, J. E. and S. J. Eisenreich. 1990. Concentrations and Fluxes of Polycyclic Aromatic Hydrocarbons and Polychlorinated Biphenyls across the Air-Water Interface of Lake Superior. *Environmental Science and Technology.* 24: 342-352.
- Ballschmiter, K. and M. Zell. 1980. Analysis of Polychlorinated Biphenyls (PCB) by Glass Capillary Gas Chromatography. *Fresenius Zeitschrift Fur Analytische Chemie.* 302: 20-31.
- Berglund, O., P. Larsson, G. Ewald, and L. Okla. 2000. Bioaccumulation and differential partitioning of polychlorinated biphenyls in freshwater, planktonic food webs. *Canadian Journal of Fisheries and Aquatic Sciences.* 57: 1160-1168.
- Borgmann, U. and D. M. Whittle. 1992. DDE, PCB, and mercury concentration trends in Lake Ontario rainbow smelt (*Osmerus mordax*) and slimy sculpin (*Cottus cognatus*): 1977 to 1988. *Journal of Great Lakes Research.* 18(2): 298-308.
- Brunciak, P. A., J. Dachs, T. P. Franz, C. L. Gigliotti, E. D. Nelson, B. J. Turpin, and S. J. Eisenreich. 2001. Polychlorinated biphenyls and particulate organic/elemental carbon in the atmosphere of Chesapeake Bay, USA. *Atmospheric Environment.* 35(32): 5663-5677.
- Burkhard, L. P. and D. Weininger. 1987. Analysis of polychlorinated biphenyls using multiple regression with outlier detection and elimination. *Analytical Chemistry.* 59: 1187-1190.
- Cahill, R. A. 1981. *Geochemistry of Recent Lake Michigan Sediments.* Circular 517: 94 pp. Illinois Institute of Natural Resources, State Geological Survey Division.
- Datta, S., L. L. McConnell, J. E. Baker, J. Lenoir, and J. N. Seiber. 1998. Evidence for atmospheric transport and deposition of polychlorinated biphenyls to the Lake Tahoe basin, California-Nevada. *Environmental Science and Technology.* 32: 1378-1385.
- DeVault, D. S., R. Hesselberg, P. W. Rodgers, and T. J. Feist. 1996. Contaminant trends in lake trout and walleye from the Laurentian Great Lakes. *Journal of Great Lakes Research.* 22(4): 884-895.
- Dunnivant, F. M., and A. W. Elzerman. 1988. Aqueous solubility and Henry's law constant data for PCB congeners for evaluation of quantitative structure-property relationships (QSPRs). *Chemosphere* 17: 525-541.
- Eisenreich, S. J., P. D. Capel, J. A. Robbins, and R.A. Bourbonniere. 1989. Accumulation and diagenesis of chlorinated hydrocarbons in lacustrine sediments. *Environmental Science and Technology.* 23: 1116-1123.
- Epplett, T. D., S. Gewurtz, R. Lazar, and G. D. Haffner. 2000. Seasonal dynamics of PCBs in the plankton of Lake Erie. *Journal of Great Lakes Research.* 26(1): 65-73.
- Fiedler, H. 2001. *Polychlorinated Biphenyls (PCB).* (<http://irptc.unep.ch/pops/stpeter/stpete2c.html>).

- Fiedler H., H. Hoff, J. Tolls, C. Mertens, A. Gruber, and O. Hutzinger. 1994. Environmental Fate of Organochlorines in the Aquatic Environment. *Organohalogen Compounds*. 15: 199 pp. ECO-INFORMA Press, Bayreuth. ISBN 3928379119.
- Filkins, J. C., J. M. Townsend, and S. G. Rood. 1983. *Organochlorines in Offshore Waters of the Great Lakes, 1981*. Report to the U.S. Environmental Protection Agency, Office of Research and Development, ERL-Duluth, Large Lakes Research Station, Grosse Ile, Michigan. 12pp.
- Fisk, A. T., K. A. Hobson, and R. J. Norstrom. 2001a. Influence of chemical and biological factors on trophic transfer of persistent organic pollutants in the Northwater Polynya marine food web. *Environmental Science and Technology*. 35: 732-738.
- Fisk, A. T., G. A. Stern, K. A. Hobson, W. J. Strachan, M. D. Loewen, and R. J. Norstrom. 2001b. Persistent organic pollutants (POPs) in a small, herbivorous, Arctic marine zooplankton (*Calanus hyperboreus*): trends from April to July and the influence of lipids and trophic transfer. *Marine Pollution Bulletin*. 43: 93-101.
- Franz, T. P., S. J. Eisenreich, and T. Holsen. 1998. Dry deposition of particulate polychlorinated biphenyls and polycyclic aromatic hydrocarbons to Lake Michigan. *Environmental Science and Technology*. 32(23): 3681-3688.
- Golden, K. A.. 1994. *Organochlorines in Lake Michigan Sediments*. (Master of Science thesis, University of Minnesota, Minneapolis, Minnesota, 1994).
- Golden, K. A., C. S. Wong, J. D. Jeremiason, S. J. Eisenreich, G. Sanders, J. Hallgren, D. L. Swackhamer, D. R. Engstrom, and D. T. Long. 1993. Accumulation and preliminary inventory of organochlorines in Great Lakes sediments. *Water Science and Technology*. 28:19-31.
- Green, M. L., J. V. DePinto, C. W. Sweet, and K. C. Hornbuckle. 2000. Regional Spatial and Temporal Interpolation of Atmospheric PCBs: Interpretation of Lake Michigan Mass Balance Data. *Environmental Science and Technology*. 34(9): 1833-1850.
- Harding, G. C., R. J. LeBlanc, W. P. Vass, R. F. Addison, B. T. Hargrave, S. Pearre, A. Dupuis, and P. F. Brodie. 1997. Bioaccumulation of polychlorinated biphenyls (PCBs) in the marine pelagic food web, based on a seasonal study in the southern Gulf of St. Lawrence, 1976-1977. *Marine Chemistry*. 56: 145-179.
- Hargrave, B. T., G. A. Phillips, W. P. Vass, P. Bruecker, H. E. Welch, and T. D. Siford. 2000. Seasonality in bioaccumulation of organochlorines in lower trophic level arctic marine biota. *Environmental Science and Technology*. 34: 980-987.
- Hermanson, M. H., E. R. Christensen, D. J. Buser, and L.-M. Chen. 1991. Polychlorinated biphenyls in dated sediment cores from Green Bay and Lake Michigan. *Journal of Great Lakes Research*. 17: 94-108.
- Hesselberg, R. J., J. P. Hickey, D. A. Nortrup, and W. A. Willford. 1990. Contaminant residues in the bloater (*Coregonus hoyi*) of Lake Michigan, 1969-1986. *Journal of Great Lakes Research*. 16(1): 121-129.

- Hoff, R. M., D. C. G. Muir, and N. P. Grift. 1992. Annual cycle of polychlorinated biphenyls and organohalogen pesticides in air in Southern Ontario. 1. Air concentration data. *Environmental Science and Technology*. 26: 266-275.
- Holson, T. M., G. J. Keeler, K. N. Noll, G. Fang, W. Lee, and J. Lin. 1993. Dry Deposition and Particle Size Distributions Measured during the Lake Michigan Urban Air Toxics Study. *Environmental Science and Technology*. 27(7): 1327-1333.
- Hop, H., K. Borga, G. W. Gabrielsen, L. Kleivane, and J. U. Skaare. 2002. Food web magnification of persistent organic pollutants in poikilotherms and homeotherms from the Barents Sea. *Environmental Science and Technology*. 36: 2589-2597.
- Hornbuckle, K. C., J. V. DePinto, M. L. Green, S. M. Miller, and J. J. Bogdan. 2001. *Atmospheric Deposition of Persistent Organic Pollutants: Results of the Lake Michigan Mass Balance Study*. Abstracts: June 10-14, 2001. International Association for Great Lakes Research, Green Bay, Wisconsin.
- Hornbuckle, K. C., D. R. Achman, and S. J. Eisenreich. 1993. Over-Water and Over-Land Polychlorinated Biphenyls in Green Bay, Lake Michigan. *Environmental Science and Technology*. 27(1): 87-98.
- Hornbuckle, K. C., C. W. Sweet, R. F. Pearson, D. L. Swackhamer, and S. J. Eisenreich. 1995. Assessing annual water-air fluxes of polychlorinated biphenyls in Lake Michigan. *Environmental Science and Technology*. 29: 869-877.
- Huestis, S. Y., M. R. Servos, D. M. Whittle, and D. G. Dixon. 1996. Temporal and age-related trends in levels of polychlorinated biphenyl congeners and organochlorine contaminants in Lake Ontario lake trout. *Journal of Great Lakes Research*. 22(2): 310-330.
- Ivanov, V. and E. Sandell. 1992. Characterization of Polychlorinated Biphenyl Isomers in Sovol and Trichlorodiphenyl Formulations by High-Resolution Gas Chromatography with Electron Capture Detection and High-Resolution Gas Chromatography - Mass Spectrometry Techniques. *Environmental Science and Technology*. 26: 2012-2017.
- Iwata, H., S. Tanabe, N. Sakai, and R. Tatsukawa. 1993. Distribution of persistent organochlorines in the oceanic air and surface seawater and the role of ocean on their global transport and fate. *Environmental Science and Technology*. 27: 1080-1098.
- Jackson, L. J. and D. E. Schindler. 1996. Field estimates of net trophic transfer of PCBs from prey fishes to Lake Michigan salmonids. *Environmental Science and Technology*. 30: 1861-1865.
- Jackson, L. J., S. R. Carpenter, J. Manchester-Neesvig, and C. A. Stow. 1998. Current concentrations of PCBs in Lake Michigan invertebrates, a prediction test, and corroboration of hindcast concentrations. *Journal of Great Lakes Research*. 24(4): 808-821.
- Jackson, L. J., S. R. Carpenter, J. Manchester-Neesvig, and C. A. Stow. 2001. PCB congeners in Lake Michigan coho (*Oncorhynchus kisutch*) and chinook (*Oncorhynchus tshawytscha*) salmon. *Environmental Science and Technology*. 35: 856-862.

- Koslowski, S. E., C. D. Metcalfe, R. Lazar, and G. D. Haffner. 1994. The distribution of 42 PCBs, including three coplanar congeners, in the food web of the western basin of Lake Erie. *Journal of Great Lakes Research.* 20(1): 260-270.
- Kucklick, J. R. and J. E. Baker. 1998. Organochlorines in Lake Superior's food web. *Environmental Science and Technology.* 32: 1192-1198.
- Leister, D. L and Baker, J. E. 1994. Atmospheric deposition of organic contaminants to the Chesapeake Bay. *Atmospheric Environment.* 28(8): 1499-1520.
- Mackay, D. 1982. Correlation of bioconcentration factors. *Environmental Science and Technology.* 16(5): 274-278.
- Mackay, D., S. Patterson, and W. H. Schroeder. 1986. Model Describing the Rates of Transfer Processes of Organic Chemicals between Atmosphere and Water. *Environmental Science and Technology.* 20: 810-816.
- Mackay D., W. Y. Shiu, and K. C. Ma. 1992. *Illustrated Handbook of Physical-Chemical Properties and Environmental Fate for Organic Chemicals.* Vol. I+II. Boca Raton, FL. Lewis Publishers Inc.
- Madenjian, C. P., R. F. Elliot, L. J. Schmidt, T. J. DeSorcie, R. J. Hesselberg, R. T. Quintal, L. J. Begnoche, P. M. Bouchard, and M. E. Holey. 1998a. Net Trophic Transfer Efficiency of PCBs to Lake Michigan Coho Salmon from Their Prey. *Environmental Science and Technology.* 32(20): 3063-3067.
- Madenjian, C. P., R. J. Hesselberg, T. J. DeSorcie, L. J. Schmidt, R. M. Stedman, R. T. Quintal, L. J. Begnoche, and D. R. Passino-Reader. 1998b. Estimate of net trophic transfer efficiency of PCBs to Lake Michigan lake trout from their prey. *Environmental Science and Technology.* 32: 886-891.
- Madenjian, C. P., T. J. DeSorcie, R. M. Stedman, E. H. Brown, Jr., G. W. Eck, L. J. Schmidt, R. J. Hesselberg, S. M. Chernyak, and D. R. Passino-Reader. 1999a. Spatial Patterns in PCB Concentrations of Lake Michigan Lake Trout. *Journal of Great Lakes Research.* 25(1): 149-159.
- Madenjian, C. P., L. J. Schmidt, S. M. Chernyak, R. F. Elliott, T. J. DeSorcie, R. T. Quintal, L. J. Begnoche, and R. J. Hesselberg. 1999b. Variation in Net Trophic Transfer Efficiencies among 21 PCB Congeners. *Environmental Science and Technology.* 33(21): 3768-3773.
- Manchester, J. B. 1993. *The Role of Porewater in the Remobilization of Sediment-bound Polychlorinated Biphenyl Congeners.* (Doctoral thesis, University of Wisconsin-Madison, 1993). 584 pp.
- Marti, E. A., and D. E. Armstrong. 1993. Polychlorinated Biphenyls in Lake Michigan Tributaries. *Journal of Great Lakes Research.* 16(3): 396-405.
- Miller, M. A., C. P. Madenjian, and R. G. Masnado. 1992. Patterns of organochlorine contamination in lake trout from Wisconsin waters of the Great Lakes. *Journal of Great Lakes Research.* 18(4): 742-754.

- Miller, S. M. 1999. *Spatial and Temporal Variability of Organic and Nutrient Compounds in Atmospheric Media Collected During the Lake Michigan Mass Balance Study.* (Master of Science thesis, State University of New York at Buffalo, 1999). 181 pp.
- Offenberg, J. H. and J. E. Baker. 1997. Polychlorinated biphenyls in Chicago precipitation: enhanced wet deposition to near-shore Lake Michigan. *Environmental Science and Technology.* 31: 1534-1538.
- Oliver, B. G. and A. J. Niimi. 1988. Trophodynamic analysis of polychlorinated biphenyl congeners and other chlorinated hydrocarbons in the Lake Ontario ecosystem. *Environmental Science and Technology.* 22: 388-397.
- Park, J. S., T. L. Wade, and S. Sweet. 2001. Atmospheric deposition of organochlorine contaminants to Galveston Bay, Texas. *Atmospheric Environment.* 35(19): 3315-3324.
- Pearson, R. F., Hornbuckle, K. C., Eisenreich, S. J., and Swackhamer, D. L. 1996. PCBs in Lake Michigan Water Revisited. *Environmental Science and Technology.* 30: 1429-1436.
- Rantanen, J. 1992. Industrial and Environmental Emergencies; Lessons Learned. *Organohalogen Compounds.* 10, 291-294.
- Rappaport, R. A. and S. J. Eisenreich. 1988. Historical atmospheric inputs of high molecular weight chlorinated hydrocarbons to eastern North America. *Environmental Science and Technology.* 22: 931-941.
- Rochkind, M. L., J. W. Blackburn, and G. S. Sayler. 1986. *Microbial Decomposition of Chlorinated Aromatic Compounds.* U.S. Environmental Protection Agency, Cincinnati, OH EPA/600/2-86/090.
- Shiu, W. Y. and D. Mackay. 1986. A Critical Review of Aqueous Solubilities, Vapor Pressures, Henry's Law Constants, and Octanol-Water Partition Coefficients of the Polychlorinated Biphenyls. *Journal of Physical and Chemical Reference Data.* 15(2): 911-929.
- Simcik, M. F., H. Zhang, S. J. Eisenreich, and T. P. Franz. 1997. Urban contamination of the Chicago/coastal Lake Michigan atmosphere by PCBs and PAHs during AEOLOS. *Environmental Science and Technology.* 31: 2141-2147.
- Simcik, M. F., I. Basu, C. W. Sweet, and R. A. Hites. 1999. Temperature dependence and temporal trends of polychlorinated biphenyl congeners in the Great Lakes atmosphere. *Environmental Science and Technology.* 33: 1991-1995.
- Simcik, M. F., R. M. Hoff, W. M. J. Strachan, C. W. Sweet, I. Basu, and R. A. Hites. 2000. Temporal trends of semivolatile organic contaminants in Great Lakes precipitation. *Environmental Science and Technology.* 34: 361-367.
- Stange, K., and D. L. Swackhamer. 1994. Factors Affecting Phytoplankton Species-specific Differences in Accumulation of 40 Polychlorinated Biphenyls (PCBs). *Environmental Toxicology and Chemistry.* 13(11): 1849-1860.
- Stow, C. A. 1995. Factors associated with PCB concentrations in Lake Michigan salmonids. *Environmental Science and Technology.* 29: 522-527.

- Stow, C. A., S. R. Carpenter, and L. A. Eby. 1995. Evidence that PCBs are approaching stable concentrations in Lake Michigan fishes. *Ecological Applications*. 5(1): 248-260.
- Swackhamer, D. L., and D. E. Armstrong. 1987. Distribution and Characterization of PCBs in Lake Michigan Water. *Journal of Great Lakes Research*. 13(1):24:36.
- Swackhamer, D. L. and D. E. Armstrong. 1988. Horizontal and vertical distribution of PCBs in southern Lake Michigan sediments and the effect of Waukegan Harbor as a point source. *Journal of Great Lakes Research*. 14: 277-290.
- Swackhamer, D. L., and R. S. Skoglund. 1993. Bioaccumulation of PCBs by Algae: Kinetics versus Equilibrium. *Environmental Toxicology and Chemistry*. 12: 831-838.
- Sweet, C. 2000. *Sampling of Atmospheric PCBs in the Lake Michigan Mass Balance Study (LMMB), 1994-1995*. [Internal document]. Great Lakes National Program Office.
- Totten, L. A., C. L. Gigliotti, and S. J. Eisenreich. 2001. *Re-evaluation of Air-water Exchange Fluxes of PCBs in Green Bay and Southern Lake Michigan in AEOLOS*. Abstracts: June 10-14, 2001. International Association for Great Lakes Research, Green Bay, Wisconsin.
- Trowbridge, A. G. and D. L. Swackhamer. 2001. *An Analysis of Polychlorinated Biphenyl Concentrations in Lower Trophic Level Organisms of the Lake Michigan Foodweb*. Abstracts: June 10-14, 2001. International Association for Great Lakes Research, Green Bay, Wisconsin.
- U.S. Department of the Interior. 1967. Water Quality Investigations, Lake Michigan Basin: Lake Currents. Federal Water Pollution Control Administration Technical Report. Great Lakes Region, Chicago, IL. 364 pp.
- USEPA. 1975. *Train Stops Manufacture of Heptachlor/Chlordane, Cites Imminent Cancer Risk*. EPA Press Release, July 30, 1975. (www.epa.gov/history/topics/legal/01.htm).
- USEPA. 1984. Title 40 of the Code of Federal Regulations, part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants*, Appendix B, *Definition and Procedure for the Determination of the Method Detection Limit*.
- USEPA. 1988. Chlordane/Heptachlor termiticides; notification of cancellation and amendment of existing stocks determination. *Federal Register* 53:11798-1 1805.
- USEPA. 1995a. *National Primary Drinking Water Regulations, Contaminant Specific Fact Sheets, Inorganic Chemicals, Technical Version*. U.S. Environmental Protection Agency, Office of Water, Washington, DC. EPA 811/F-95/002-T.
- USEPA. 1995b. *National Primary Drinking Water Regulations, Contaminant Specific Fact Sheets, Synthetic Organic Chemicals, Technical Version*. U.S. Environmental Protection Agency, Office of Water, Washington, DC. EPA 811/F-95/003-T.
- USEPA. 1997a. *Lake Michigan Mass Budget/Mass Balance Work Plan*. U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL. EPA 905/R-97/018.

- USEPA. 1997b. Mercury Study Report to Congress. U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards and Office of Research and Development, Research Triangle Park, NC. EPA 452/R-97/003.
- USEPA. 1997c. *The Enhanced Monitoring Program Quality Assurance Program Plan*. U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL. EPA 905/R-97/017.
- USEPA. 1997d. *Lake Michigan Mass Balance Project (LMMB) Methods Compendium, Volume 1: Sample Collection Techniques*. U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL. EPA 905/R-97/012a.
- USEPA. 1997e. *Lake Michigan Mass Balance Project (LMMB) Methods Compendium, Volume 2: Organic and Mercury Sample Analysis Techniques*. U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL. EPA 905/R-97/012b.
- USEPA. 1998. *The Lake Michigan Mass Balance Project Quality Assurance Plan for Mathematical Modeling, Version 3.0*. U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL.
- USEPA. 1999. *National Recommended Water Quality Criteria-Correction*. U.S. Environmental Protection Agency, Office of Water, Washington, DC. EPA 822/Z-99/001.
- USEPA. 2001a. Ambient Aquatic Life Water Quality Criteria for Atrazine. U.S. Environmental Protection Agency, Office of Water, Washington, DC.
- USEPA. 2001b. *The Lake Michigan Mass Balance Study Quality Assurance Report*. U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL. EPA 905/R-01/013.
- USEPA. 2001c. *Results of the Lake Michigan Mass Balance Study: Atrazine Data Report*. EPA 905/R-01/010. U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL.
- USEPA. 2004. *Results of the Lake Michigan Mass Balance Study: Mercury Data Report*. EPA 905/R-01/012. U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL.
- Van den Berg, M., L. Birnbaum, A. T. C. Bosveld, B. Brunstrom, P. Cook, M. Feeley, J. P. Giesy, A. Hanberg, R. Hasegawa, S. W. Kennedy, T. Kubiak, J. C. Larsen, F. X. R. van Leeuwen, A. K. D. Liem, C. Nolt, R. E. Peterson, L. Poellinger, S. Safe, D. Schrenk, D. Tillitt, M. Tysklind, M. Younes, F. Warn, and T. Zacharewski. 1998. Toxic Equivalency Factors (TEFs) for PCBs, PCDDs, PCDFs for Humans and Wildlife. *Environmental Health Perspectives*. 106: 775-792.
- Van Hoof, P. 2000. *PCBs in Lake Michigan Surficial Sediments*. [Internal document]. Great Lakes National Program Office.
- Willman, E. J., J. B. Manchester-Neesvig, and D. E. Armstrong. 1997. Influence of ortho-substitution on patterns of PCB accumulation in sediment, plankton, and fish in a freshwater estuary. *Environmental Science and Technology*. 31: 3712-3718.

Willman, E. J., J. B. Manchester-Neesvig, C. Agrell, and D. E. Armstrong. 1999. Influence of ortho-substitution homolog group on polychlorobiphenyl bioaccumulation factors and fugacity ratios in plankton and zebra mussels (*Dreissena polymorpha*). *Environmental Toxicology and Chemistry*. 18(7): 1380-1389.

World Health Organization (WHO). 1988. IPCS International Programme on Chemical Safety. Health and Safety Guide No. 13. *Chlordane Health and Safety Guide*.
(www.inchem.org/documents/hsg/hsg/hsg013.htm).